

Listing of claims:

Claim 1 (*Canceled*).

2. (*Previously presented*) The system of claim 6, wherein the communications engine uses SSL to create a secure communications link with the client.

3. (*Previously presented*) The system of claim 6, wherein the communications engine negotiates an encryption protocol for transferring messages to and from the client.

4. (*Previously presented*) The system of claim 6, wherein the communications engine uses public key certificates for transferring messages to and from the client.

5. (*Previously presented*) The system of claim 6, wherein the security services use public key certificates to authenticate a user of the client to determine the user privileges.

6. (*Previously presented*) A system on a server computer system, comprising:  
a communications engine for establishing a communications link with a client;  
security services coupled to the communications engine for presenting to a user of the client a plurality of user authentication protocol options, each user authentication protocol option having a particular level of authentication associated with it, for authenticating the user according to at least one user authentication protocol and for determining user privileges based on the identity of the user and the level of authentication;

a web server for presenting a set of available services based on the user privileges, at least one of the available services requiring additional authentication information to be provided before access to the service is granted, and for enabling the client to select a particular service from the set of available services;

a host engine coupled to the security services and to the web server for providing to the client service communication code that enables communication with the particular service; and

a key safe for storing keys, each key for enabling communication between the client and a respective service from the set of available services and including all additional authentication information required by the respective service for authenticating the user to the respective

service, thereby enabling the client to access the available services without storing the service communication code and keys at the client or having to carry or remember them.

Claim 7 (*Canceled*).

8. (*Previously presented*) The system of claim 6, wherein the security services use a digital signature to authenticate the user to determine the user privileges.

9. (*Previously presented*) The system of claim 6, wherein the host engine forwards to the client security code for enabling the client to perform a security protocol recognized by the security services.

10. (*Previously presented*) The system of claim 6, wherein one of the available services is secured by a firewall and one of the keys includes the additional authentication information to enable communication through the firewall.

11. (*Previously presented*) The system of claim 6, further comprising a firewall for protecting the system.

12. (*Previously presented*) The system of claim 6, wherein one of the keys includes an address identifying the location of the selected service.

13. (*Previously presented*) The system of claim 6, wherein the code uses a key to provide to the client a direct connection with the selected service.

14. (*Previously Presented*) The system of claim 6, further comprising a proxy for communicating with the selected service, and wherein the code enables the client to communicate with the proxy and one of the keys enables the proxy to locate the selected service.

Claim 15 (*Canceled*).

16. *(Previously presented)* The method of claim 20, wherein establishing a communications link includes the step of using SSL to create a secure communications link with the client.

17. *(Previously presented)* The method of claim 20, wherein establishing a communications link includes the step of negotiating an encryption protocol for transferring messages to and from the client.

18. *(Previously presented)* The method of claim 20, wherein establishing a communications link includes the step of using public key certificates for transferring messages to and from the client.

19. *(Previously presented)* The method of claim 20, wherein determining user privileges includes the step of using public key certificates to authenticate a user of the client.

20. *(Previously presented)* A computer-based method comprising:  
establishing a communications link with a client;  
presenting to a user of the client a plurality of user authentication protocol options, each user authentication protocol option having a particular level of authentication associated with it;  
authenticating the user according to at least one user authentication protocol option;  
determining user privileges based on the identity of a user and the level of authentication;  
presenting a set of available services based on the user privileges, at least one of the available services requiring additional authentication information to be provided before access to the service is granted;  
enabling the client to select a particular service from a set of available services;  
providing to the client service communication code that enables communication with the particular service; and  
retrieving a key from a set of keys, each key corresponding to a respective service from the set of available services, the retrieved key for enabling communication between the client and the particular service and including all additional authentication information required by the respective service for authenticating the user to the respective service, thereby enabling the client

means for presenting to a user of the client a plurality of user authentication protocol options, each user authentication protocol option having a particular level of authentication; associated

means for authenticating the user according to at least one user authentication protocol;

means for determining user privileges based on the identity of a user and the level of authentication;

means for presenting a set of available services based on the user privileges, at least on of the available services requiring additional authentication information to be provided before granting access to the service;

means for enabling the client to select a particular service from a set of available services;

means for providing to the client service communication code that enables communication with the particular service; and

means for retrieving a key from a set of keys, each key corresponding to a respective service from the set of available services, the retrieved key for enabling communication between the client and the particular service and including all additional authentication information required by the respective service for authenticating the user to the respective service, thereby enabling the client to access the available services without storing the service communication code and keys at the client.

30. (*Previously presented*) A computer-based storage medium storing a program for causing a computer to perform the steps of:

establishing a communications link with a client;

presenting to a user of the client a plurality of user authentication protocol options, each user authentication protocol option having a particular level of authentication associated with it;

authenticating the user according to at least one user authentication protocol option;

determining user privileges based on the identity of a user and the level of authentication;

presenting a set of available services based on the user privileges, at least one of the available services requiring additional authentication information to be provided before access to the service is granted;

enabling the client to select a particular service from a set of available services;

to access the available services without storing the service communication code and keys at the client or having to carry or remember them.

Claim 21 (*Canceled*).

22. (*Previously presented*) The method of claim 20, wherein determining user privileges includes the step of using a digital signature to authenticate the user.

23. (*Previously presented*) The method of claim 20, wherein establishing a communications link includes forwarding to the client security code for enabling the client to perform a recognized security protocol.

24. (*Previously presented*) The method of claim 20, further comprising the step of using one of the keys to communicate through a firewall to the selected service.

25. (*Previously presented*) The method of claim 20, wherein the method is performed by a server and further comprising using a firewall to protect the server.

26. (*Previously presented*) The method of claim 20, wherein one of the keys includes an address identifying the location of the selected service.

27. (*Previously presented*) The method of claim 20, wherein providing includes the step of providing to the client a direct connection with the service.

28. (*Previously presented*) The method of claim 20, further comprising using a proxy to communicate with the service, and wherein providing includes enabling the client to communicate with the proxy.

29. (*Currently amended*) A system on a server computer system, comprising:  
means for establishing a communications link with a client;

providing to the client service communication code that enables communication with the particular service; and  
retrieving a key from a set of keys, each key corresponding to a respective service from the set of available services, the retrieved key for enabling communication between the client and the particular service and including all additional authentication information required by the respective service for authenticating the user to the respective service, thereby enabling the client to access the available services without storing the service communication code and keys at the client or having to carry or remember them.

Claim 31 (*Canceled*).

32. (*Previously presented*) A method, comprising:  
receiving, from a client, as an advance communication, security information corresponding to one or more secured network services;  
storing the security information at a location remote from the client;  
receiving a user request from a user to access a secured network service; and  
using the stored security information to enable the user access to the secured network service without requiring the user to supply the stored security information.

33. (*Previously presented*) A method according to claim 32, wherein the security information includes one or more keys corresponding to respective ones of the secured network services.

34. (*Previously presented*) A method according to claim 33, wherein at least one of the keys includes a certificate for accessing at least one of the secured network services.

35. (*Previously presented*) A method according to claim 32, further comprising determining user privileges of the user, and wherein the using the stored security information is provided if the privileges correspond to privilege requirements of the secured network service.

36. *(Previously presented)* A method according to claim 32, further comprising determining user privileges of the user and enabling the user to select a service from ones of the secured network services corresponding to the determined user privileges.

37. *(Previously presented)* A system, comprising:  
means for receiving, from a client, as an advance communication, security information corresponding to one or more secured network services;  
means for storing the security information at a location remote from the client;  
means for receiving a user request from a user to access a secured network service; and  
means for using the stored security information to enable the user access to the secured network service without requiring the user to supply the stored security information.

38. *(Previously presented)* A computer-readable storage medium storing program code for causing a computer to perform the steps of:  
receiving, from a client, as an advance communication, security information corresponding to one or more secured network services;  
storing the security information at a location remote from the client;  
receiving a user request from a user to access a secured network service; and  
using the stored security information to enable the user access to the secured network service without requiring the user to supply the stored security information.

39. *(Previously presented)* A server computer system, comprising:  
a communications engine for establishing a communications link with a client;  
security services coupled to the communications engine for presenting a user of the client a plurality of user authentication protocol options, each user authentication protocol option having a particular level of authentication associated with it, for authenticating the user according to at least one user authentication protocol and for determining user privileges based on the identity of the user and the level of authentication; and  
a web server for presenting information to the user based on the user privileges.